

What is Claimed is:

1
1 1. A packaging process for an image sensing component of
2 which comprising a printed circuit board, a carrier, and a glass
3 plate; wherein a plurality of said printed circuit board,
4 carriers, and glass plates being placed in a main tray, a first
5 tray, and a second tray respectively for the packaging process,
6 comprising the steps of:

7 performing a rinsing process on the printed circuit board,
8 carrier, and glass plate in the main tray, the first tray, and
9 the second tray respectively as a pre-treatment;

10 dispensing the printed circuit board, and then capturing
11 the carriers in the first tray onto each of the printed circuit
12 board of the main tray;

13 performing a thermal pressing process and an adhering process
14 on the printed circuit board and the carrier;

15 dispensing the glass plate, and then collecting the carrier
16 in the first tray to each printed circuit board of the main tray;
17 and

18 adhering the glass plate onto the carrier by thermal pressing
19 in the high-pressure working environment.
20

1 2. A packaging process for an image sensing component as
2 claimed in claim 1, wherein said pre-treatment of the rinsing
3 process further comprising the steps of:

4 performing a defatted rinsing, which rinses the component
5 in a neutral rinsing solution to remove organic substance and
6 impurities by means of supersonic vibration;

7 performing a pure water rinsing, which rinses the component
8 in a deionized pure water to remove organic substance and
9 impurities by means of supersonic vibration; and

10 baking the component to remove moisture.
11

1 3. A packaging process for an image sensing component as
2 claimed in claim 1, wherein said pre-treatment of the
3 rinsing process for the glass plate comprising the steps
4 of:

5 performing a pure water rinsing, which rinses the
6 component in a deionized pure water to remove organic substance
7 and impurities by means of supersonic vibration; and
8 baking the component to remove moisture.
9

1 4. A packaging process for an image sensing component as
2 claimed in claim 1, wherein said carrier being made of
3 plastic material with the properties of high density,
4 high temperature resistance, and low humidity.
5

1 5. A packaging process for an image sensing component as
2 claimed in claim 1, wherein said high-pressure gas being
3 one selected from nitrogen and helium, and its pressure
4 ranging from 8 Kg/cm² to 12 Kg/cm².
5

1 6. A packaging process for an image sensing component as
2 claimed in claim 1, wherein said adhering process for
3 the printed circuit board and the carrier further
4 comprising a chip adhering process and a conductive wire
5 mounting.
6

1 7. A packaging process for an image sensing component as
2 claimed in claim 6, wherein said chip adhering process
3 further comprising the process of low-temperature
4 cooling, nitrogen blowing, and baking.
5

1 8. A packaging process for an image sensing component as
2 claimed in claim 1, wherein said dispenser being one
3 selected from gluing and silkscreen.

4
1 9. An image sensing chip for being used in an optical
2 device to capture optical image, comprising:

3 a printed circuit board, having a semiconductor chip
4 inside;

5 a plastic carrier, for adhering onto the printed
6 circuit board; and

7 a glass plate, for mounting on the plastic carrier,
8 and enclosing a space with the printed circuit board
9 and the plastic carrier, and a high-pressure gas being
10 sealed inside said space.

11
12 10. An image sensing chip for being used in an optical
13 device to capture optical image as claimed in claim 9,
14 wherein said plastic carrier having the properties of
15 high density, high temperature resistance, and low
16 humidity.

17 11. An image sensing chip for being used in an optical
18 device to capture optical image as claimed in claim 9,
19 wherein said high-pressure gas being selected one from
20 the group of nitrogen and helium, and its pressure ranging
21 from 8 Kg/cm² to 12 Kg/cm².

22 12. An image sensing chip for being used in an optical
23 device to capture optical image as claimed in claim 9,
24 wherein said image sensing chip further comprising a
25 plurality of electrically conductive pads which are
26 disposed at the external side of the image sensing chip.